Field Environmental Science Officer
Checklist

Technical Guide 202

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U.S. Armus ar for Health Promotion and Prevent Medicine (Provision Field Environmental Health Processing Services (Provision of Proving Ground, Maryland (Provision of Proving Ground, Maryland (Proving Ground, Maryland (Proving

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#### **PREFACE**

The Environmental Science Officer (ESO) or the Sanitary Engineer assigned as the ESO, is responsible for providing direction and leadership to the Preventive Medicine (PVNTMED) Section/Detachment (Sec/Det) assigned to the Division (Div), Brigade (Bde), Group, or Area Support Medical Battalion (ASMB). The PVNTMED Sec/Det provides--

- Training (i.e., field sanitation, climatic injury prevention, medical threat briefings, etc.),
- Inspections (i.e., food facilities, water treatment and transportation, field sanitation, etc.),
- Management of various PVNTMED programs within the organization.

#### **PURPOSE**

This technical guide (TG) helps the ESO focus his/her attention and efforts to maximize the effectiveness of the PVNTMED program. Designed as a self-evaluation checklist, this TG familiarizes the ESO with his/her role in supporting PVNTMED.

The checklist is composed of questions developed from the experience of other ESOs. The items are considered required or good working practices. The checklist is not all inclusive and the ESO must refer to the references for more comprehensive information. Some subject areas will not be appropriate for each PVNTMED Sec/Det.

#### AREAS OF INTEREST

The checklist contained herein covers the following:

- Section 1: Equipment/Maintenance
- Section 2: Training
- Section 3: Deployment/Exercise Planning
- Section 4: Medical Threat
- Section 5: Food Sanitation Inspection/Training
- Section 6: Water Quality
- Section 7: Hearing Conservation
- Section 8: Entomology
- Section 9: Field Sanitation
- Section 10: Industrial Hygiene
- Section 11: Waste Disposal

#### THE CHECKLIST

# **SECTION 1: EQUIPMENT/MAINTENANCE**

The ESO in a Division or serving as an Executive Officer in a detachment may not be a hand-receipt holder; however, he/she has supervisory responsibility for the equipment within the section. The ESO serving as the detachment commander will be a hand-receipt holder. In any situation the ESO must ensure the unit equipment is available, is properly accounted for, and is mission capable. The following questions address equipment accountability, maintenance and calibration.

1-1. Does the ESO		
• have the unit Modified Table of Equipment (MTOE)?	Yes	No
• have the current hand receipt?	Yes	No
1-2. Does the PVNTMED Sec/Det		
• have a copy of a technical manual (TM), field manual (FM) or supply catalog (SC) for each end item on the hand receipt?	Yes	No
• have a Unit Assembly Listing (UAL) for each end item on the hand receipt?	Yes	No
• sub-hand receipt each end item down to the user level?	Yes	No
• have a quarterly "sets, kits and outfits" inventory scheduled?	Yes	No
• have a maintenance and inventory program?	Yes	No
• incorporate maintenance/serviceability checks into the training schedule?	Yes	No
1-3. Does the Sec/Det		
• have Material Safety Data Sheets (MSDSs) for all hazardous chemicals?	Yes	No
• have any chemicals exceeding the expiration date?	Yes	No
• have expired chemicals receiving a shelf-life extension?	Yes	No
• store hazardous materials compatibly (TM 38-410)?	Yes	No

1-4.	Are all end items on hand or on order?	Yes	No
1-5.	Are all components on hand or on order?	Yes	No
1-6.	Are all shortages documented on a Shortage Annex and on file with the parent unit G-4 or S-4 and Property Book Officer?	Yes	No
1-7.	Once deployed, does the PVNTMED Sec/Det identify its supporting quartermaster and maintenance units and establish accounts as required?	Yes	No
1-8.	Does the Sec/Det:		
•	complete DA Form 2406 on each piece of equipment during their maintenance program?	Yes	No
•	calibrate all required items by the test, measurement and diagnostic equipment (TMDE) unit?	Yes	No
•	have 30-45 days of supplies on hand?	Yes	No
1-9.	Are hand receipts updated semiannually?	Yes	No
1-10.	If a hand-receipt holder is not available, such as for temporary duty (TDY) or leave of more than 30 days, is his/her equipment hand receipted to someone else?	Yes	No
1-11.	If the Sec/Det has teams, are the teams responsible for the equipment?	Yes	No
	E: Specific questions should be addressed to the unit supply sergeant, pany Commander, Battalion/Group S-4, or the appropriate Property Book	Offic	er.

# **SECTION 2: TRAINING**

Training is vital in preparing soldiers to accomplish their mission. The ESO must understand how to plan training and what training to plan. The ESO must also ensure his/her soldiers are preparing for future promotion. The following questions address these areas.

#### 2-1. Does the ESO--

•	Focused Training? Training the Force, and FM 25-101, Battle	Yes	No
•	have a copy of FM 8-250, Preventive Medicine Specialist?	Yes	No
•	have a copy of STP 21-24, Soldiers Manual of Common Tasks?	Yes	No
•	attend unit training meetings?	Yes	No
•	have a long- and short-range training schedule?	Yes	No
•	have a copy of the Det's Mission Essential Task List?	Yes	No
•	have a copy of the Sec Battle Tasks?	Yes	No
•	have a copy of the current Quarterly Training brief format?	Yes	No
•	provide input into the training schedule?	Yes	No
•	include in the training schedule 91S training on equipment and procedures?	Yes	No
•	include in the training schedule mechanic training on equipment and procedures?	Yes	No
•	include CTT in the training schedule?	Yes	No
•	conduct monthly and quarterly counseling of the noncommissioned officer in charge (NCOIC)?	Yes	No
2-2.	Does the PVNTMED Sec/Det have a medical proficiency training program for the 91S and mechanics?	Yes	No
2-3.	Does the NCOIC conduct monthly/quarterly counseling of all noncommissioned officers (NCOs)?	Yes	No

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2-4.	Are soldiers enrolled in correspondence courses and/or continuing education courses?	Yes	No
2-5.	Does the Div ESO have a copy of the Division Long Range Training Calendar?	Yes	No
CON	MMENTS:		

#### SECTION 3: DEPLOYMENT/EXERCISE PLANNING

The ESO must ensure he/she addresses and plans for PVNTMED issues in the appropriate level Operations Orders. The ESO must be aggressive during training exercises to become involved in the planning process. Failure to do so may prevent the ESO from becoming involved during deployment planning. Once the ESO has been accepted as part of the planning process, the rest of the planning team will come to expect his/her input. The following questions address the planning process which should occur prior to deployment and upon arrival in theater.

3-1.	Does the PVNTMED Sec/Det provide input into the Corps/Div/Bde/Group/ASMB Operations order?	Yes	No
3-2.	Do you know which command channels or technical channels to use in receiving and providing information?	Yes	No
3-3.	Are Medical Threat sections (see Section 4) included in the Corps/Div/Bde/Group/ASMB Operations order?	Yes	No
3-4.	Do the PVNTMED Sec/Det personnel participate in Command Post Exercises?	Yes	No
3-5.	Does the ESO use established PVNTMED teams during deployments and exercises?	Yes	No
3-6.	Have Div ESOs established communications with the Medical Company Commanders that the PVNTMED teams may be attached to during deployments and exercises?	Yes	No
3-7.	Has the ESO established communications with units which the PVNTMED teams are habitually aligned to support?	Yes	No
3-8.	Prior to deploying or immediately upon arriving in theater, does the ESO establish communications with PVNTMED staffs and Sec/Det within your area of operation (AO)?	Yes	No
3-9.	Once the ESO establishes communications with supporting and supported PVNTMED staffs and Sec/Det, does he/she coordinate the following information:		
•	Taskings and areas of responsibility?	Yes	No
•	Reporting procedures and requirements?	Yes	No

• Medical Threat information?	Yes	No
• Technical guidance?	Yes	No
3-10. Does the PVNTMED Sec/Det assist with Preparations for Overseas Movement (POM) operations?	Yes	No
3-11. Are the following publications on hand		
• AR 200-1, Environmental Protection and Enhancement?	Yes	No
• AR 40-5, Preventive Medicine?	Yes	No
• FM 8-10, Health Service Support in a Theater of Operations?	Yes	No
• FM 8-10-4, Medical Platoon Leaders' Handbook?	Yes	No
• FM 8-10-7, Health Service Support in a Nuclear, Biological, and Chemical Environment?	Yes	No
• FM 8-10-24, Area Support Medical Battalion?	Yes	No
• FM 8-55, Planning For Health Service Support?	Yes	No
3-12. Does the ESO have and deploy with a:		
• "Leader Handbook?"	Yes	No
• Book Set, Preventive Medicine Text I?	Yes	No
3-13. Do the PVNTMED Teams deploy with copies of the following:		
• Appropriate Medical Threat brief?	Yes	No
• Deployment standard operating procedures (SOPs)?	Yes	No
• Div/Group/Bde/Corps Readiness SOP or tactical SOP?	Yes	No
POM and Soldier Readiness Checks requirements?	Yes	No
3-14. Do all soldiers, who require Family Care Plans, have approved Family Care Plans?	Yes	No
3-15. Do all soldiers have a Power of Attorney?	Yes	No

3-16.	Do all soldiers have a Will?	Yes	No
3-17.	Do all soldiers have their required immunizations?	Yes	No
3-18.	Does the PVNTMED Sec/Det have approved and tested loaded plans?	Yes	No
	Has the PVNTMED Sec/Det identified all hazardous cargo and coordinated with the unit movement officer for proper documentation? .	Yes	No
	Has the PVNTMED Sec/Det provided courtesy Field Sanitation Team inspections for deploying units?	Yes	No
	E: Specific questions should be brought to the attention of the unit tions officer (S-3/G-3/J-3), intelligence officer (S-2/G-2/J-2) and commande	er.	

#### **SECTION 4: MEDICAL THREAT**

A key element of PVNTMED is the prevention. The Medical Threat Program should ensure the ESO has the resources available to prepare and conduct a Medical Threat brief when called upon. However, the ESO should not wait until the deployment planning starts. The ESO should start now collecting information, preparing Medical Threat briefs for the areas where his/her unit will most likely be deployed. The following questions address the Medical Threat brief process.

4-1. Does the ESO know what the AO for his/her parent unit is?	Yes	No
4-2. Has the ESO identified potential countries which are not in his/her parent unit AO but where his/her parent unit may deploy?	Yes	No
4-3. Does the PVNTMED Sec/Det		
• have access to email and Video Teleconference Center?	Yes	No
• have access to the Armed Forces Medical Intelligence Center (AFMIC) Disease and Environmental Alert Reports (DEARs)?	Yes	No
• have access to the AFMIC Bulletin Board?	Yes	No
• have access to the Defense Pest Management Information Analysis Center (DPMIAC) Disease Vector Ecology Profiles?	Yes	No
• have Medical Threat briefs prepared for the AOs for his/her unit?	Yes	No
• conduct or ensure Medical Threat briefs are provided prior to deployments (training and mission oriented)?	Yes	No
• provide the Div, Bde, Group, or ASMB staff with a Medical Threat brief for inclusion in the Operations order?	Yes	No
• have a list of Medical Threat countermeasures for input into the Medical Threat brief?	Yes	No
• coordinate with the Medical Supply section for availability of required prophylaxis?	Yes	No
• conduct training or epidemiology interview procedures?	Yes	No

• AR 600-110, Identification, Surveillance, and Administration of	es	
Personnel Infected with Human Immunodeficiency Virus? Ye		No
• FM 8-33, Control of Communicable Diseases in Man? Ye	es	No
• TB MED 507, Occupational and Environmental Health: Prevention, Treatment and Control of Heat Injury?	es	No
4-5. Once deployed does the ESO:		
• have a copy of the required medical reports for the deployment? Yes	es	No
Do the medical reports request Disease and Non-Battle Injury (DNBI) information for use during epidemiology investigations? Y	es	No
Do 91S conduct epidemiology interviews to collect DNBI information? Y	es	No
• review medical reports for possible epidemiology information? Y	es	No

#### **NOTE:**

(1) Check with the Div/Bde/Group Surgeon and/or Div for the AFMIC and DPMIAC reports or profiles.

• provide epidemiology and medical threat updates to the parent unit staff and commander throughout a deployment (see Appendix B, Joint Medical

Surveillance Form)? . . . . . . . . . . . . . . . Yes No

(2) AFMIC's and DEAR's phone number is DSN 343-7214/3839.

# SECTION 5: FOOD SANITATION INSPECTION/TRAINING

While in garrison, the Installation Medical Authority, PVNTMED Section, and the Veterinary Section are required, by TB MED 530, Occupational and Environmental Health: Food Service Sanitation, and AR 40-5, Preventive Medicine to operate the Food Service Facility Inspection program. However the Field PVNTMED personnel may augment the Installation's program(s) if a Memorandum of Understanding (MOU) or Memorandum of Agreement (MOA) has been established with the Installation PVNTMED Section. The following questions address the Div/Det Food Service Sanitation Facility Inspection Program.

5-1. Does an MOA or MOU with the Installation PVNTMED Section outline responsibilities for conducting food service facility inspections in garrison facilities?
5-2. Has the ESO coordinated with the Installation ESO or Chief PVNTMED to ensure all food service facilities are inspected properly? Yes No
5-3. Does the PVNTMED Sec/Det
• have an SOP for food-service facility inspections? Yes No
• use DA Form 5161 and DA Form 5162 (see Appendix) for food-service facility inspections?
• conduct field-food service inspections? Yes No
• conduct food-sanitation courses in accordance with TB MED 530? Yes No
5-4. Have reporting procedures for garrison food-service facility inspections been coordinated with installation PVNTMED personnel? Yes No
5-5. During deployments or exercises, does the PVNTMED Sec/Det
• coordinate with the appropriate quartermaster unit for locations of all class-one issue points [Troup Issue Supply Activity (TISA)]? Yes No
• establish a list of all food-service facilities he/she is responsible for inspecting within his/her AO?
• coordinate with the Veterinarian/Veterinarian Det to ensure all class-one supply points are inspected? Yes No

•	coordinate with the contracting officer(s) for inspection of all contracted class-one supply points, (if not accomplished by Veterinarian Sec/Det)? Yes	No
5-6.	Does the PVNTMED Sec/Det inspect civilian food establishments frequented by U.S. service members while deployed? Yes	No
5-7.	Are the following publications on hand	
•	AR 40-657, Veterinary/Medical Food Inspection and Laboratory Service? Yes	No
•	TB MED 530, Occupational and Environmental Health: Food Service Sanitation (one per team/inspector)? Yes	No

# **SECTION 6: WATER QUALITY**

Water in a field environment is crucial to sustain the troops. Troops must have potable water to drink, cook, and use for personal hygiene. Without potable water, soldiers may contract a waterborne disease. The ESO's failure to ensure that shower, laundry and recycling points are operating properly may create unsanitary conditions which may decrease mission effectiveness. The following questions address field water quality. Some questions may not be appropriate for some training exercises or garrison operations.

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6-1. While in garrison, does the PVNTMED Sec/Det conduct semiannual water trailer and tanker inspections (TB MED 577, para 7-8)?	Yes	No
6-2. Does the PVNTMED Sec/Det		
• understand how to evaluate the use of lower quality water for emergency situations and advise the commander and command surgeon of alternatives (TB MED 577, para 3-3)?	Yes	No
• have an SOP for inspection of water points, water trailers, shower points, water recycling operations, and decontamination points?	Yes	No
• have copies of DA Form 5456-R, 5457-R and 5458-R (see Appendix)?	Yes	No
• have an SOP for collecting water samples, custody of water samples, preparing Hydrosol or Coli-lert, and quality control to reduce false positives and negatives?	Yes	No
6-3. During deployments, does the PVNTMED Sec/Det		
• coordinate with the appropriate quartermaster unit for locations of all water supply points? (Coordinate with personnel in Water Supply Battalion, Group if in AO.)		No
• coordinate with engineer units for well drilling (if required)?	Yes	No
• coordinate with units for production capabilities?	Yes	No
• coordinate with engineers for possible water supply points?	Yes	No
• coordinate with the contracting officer(s) for inspection of all contracted ice factories (if not accomplished by Veterinarian Sec/Det)?	Yes	No

	coordinate with the appropriate medical staff for their area of responsibility?	Yes	No
	conduct field-shower point and personnel-decontamination station in spections in the field (TB MED 577, para 8-6)?	Yes	No
	conduct water-recycling inspections in a field setting (TB MED 577, para 9-6)?	Yes	No
	conduct water-point inspections in a field setting (TB MED 577, para 5-7)?	Yes	No
d	assist in water-source reconnaissance and test raw-water sources to determine suitability for treatment by water purification units (TB MED 577, paras 4-5, 4-6, and 4-8)?	Yes	No
	test treated water to ensure water-quality standards are met (TB MED 577, para 5-13)?	Yes	No
• 0	coordinate with Vet Det for bottled water plant inspections?	Yes	No
6-4.	Are the following publications on hand		
	AR 700-136, Land Based Water Resources Management in Contingency Operations?	Yes	No
	TB MED 575, Swimming Pools and Bathing Facilities, (one per team or inspector)?	Yes	No
a	TB MED 576, Occupational and Environmental Health: Sanitary Control and Surveillance of Water Supplies at Fixed Installations, (one per team or inspector)?	Yes	No
	TB MED 577, Occupational and Environmental Health: Sanitary Control and Surveillance of Field Water Supplies, (one per team or inspector)?	Yes	No
	TM 5-660, Maintenance and Operation of Water Supply, Treatment, and Distribution Systems?	Yes	No
• 7	TM 5-662, Swimming Pool Operations and Maintenance?	Yes	No

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•	FM 10-52, Water Supply in Theaters of Operation?	Yes	No
•	FM 10-52-1, Water Supply Point Equipment and Operations?	Yes	No

# **SECTION 7: HEARING CONSERVATION**

The installation hearing-conservation program is operated by the installation Audiology Sec/Office. Since field units are not authorized an audiologist, the ESO must manage the unit hearing conservation program. A soldier's hearing is vital for the detection of the enemy, communication and daily existence of a soldier. Without good hearing, a soldier may not hear enemy movement or may not properly interpret a radio message. In 1993 nearly one out of every ten soldiers tested showed hearing loss. The following questions address the hearing conservation program.

7-1. Is there a local supplement to AR 40-5 delineating the responsibilities among command, medical, safety, supervisory and other applicable personnel for hearing conservation (DA PAM 40-501)?	Yes	No
7-2. Does the PVNTMED Sec/Det		
• conduct or coordinate hearing conservation training for supported units? .	Yes	No
• conduct compliance inspections for hearing conservation?	Yes	No
• address the following questions in a hearing conservation inspection:		
Is the officer or NCO appointed on orders (AR 40-5, para 5-13)?	Yes	No
Are noise hazardous areas and equipment posted with appropriate signs or decals (AR 40-5, para 5-13)?	Yes	No
Is an adequate supply of preformed earplugs, in all three sizes of the triple-flange and all five sizes of the single-flange, available for incoming personnel or soldiers who do not have earplugs (AR 40-5, para 5-13)?	Yes	No
Have soldiers been fitted with preformed earplugs by medically-trained personnel (AR 40-5, para 5-13 and DA PAM 40-501, para 1-4g(2))?	Yes	No
Are hand-formed earplugs (foam or silicone) available at noise-hazardous operations for visitors or individuals who forget their fitted earplugs (DA PAM 40-501)?	Yes	No
Are earplug carrying cases with earplugs worn on the battle dress uniforms (BDU) or load bearing equipment (LBE) if authorized by local commanders (AR 670-1 and DA PAM 40-501)?	Yes	No

Is the wearing of hearing protective devices enforced (AR 40-5, para 5-13)?	Yes	No
Do trained and currently certified personnel conduct audiometric evaluations on all soldiers working in noise-hazardous areas (AR 40-5, para 5-13)?	Yes	No
Are noise muffs and combat vehicle crewmens' helmets checked at least semi-annually for serviceable earcup seals (e.g., cracked or hardened seals) (DA PAM 40-501)?	Yes	No
Are combat vehicle crewmens' helmets fitted individually from the three available sizes (DA PAM 40-501)?	Yes	No
Do all combat vehicle crewman's helmets have chin straps (DA PAM 40-501)?	Yes	No
7-3. Has the PVNTMED Sec/Det properly calibrated their dosimetry equipment?	Yes	No
7-4. Is DA PAM 40-501, Occupational and Environmental Health: Hearing Conservation, on hand?	Yes	No
7-5. Are the required current publications on hand or on order?	Yes	No
• AR 40-5, Preventive Medicine?	Yes	No
• AR 385-10, Army Safety Program?	Yes	No
• AR 385-40, Accident Reporting and Records?	Yes	No
• AR 385-63, Policies and Procedures for Firing Ammunition for Training, Target Practice and Combat?	Yes	No
• DA PAM 40-501, Hearing Conservation?	Yes	No
• Safety Color Code Markings, Signs and Tags - Information Guide?	Yes	No
NOTE: Coordinate with the installation audiologist, occupational health nurse, PVNTMED officer and the unit surgeon for further guidance.	or	

#### SECTION 8: ENTOMOLOGY

Each installation should have an Entomology section on the installation staff. However, this section does not deploy with the ESO's unit, and the unit may have the only entomology equipment and supplies available. The ESO may be required to answer questions about different types of rodents and arthropods and about how to reduce the health risk associated. The PVNTMED Sec/Det may be required to use pesticides. Personnel using pesticides must be certified and must understand the associated dangers. The following questions address entomology equipment, supplies and usage.

#### 8-1. Does the PVNTMED Sec/Det--

• have the required MTOE arthropod/rodent control equipment on hand?	Yes	No
• have the required basic load for pesticide operations as required by applicable MTOE and the Common Table of Allowances (CTA)?	Yes	No
• use proper storage techniques for pesticides according to AR 40-5, AR 200-1 and AR 420-76?	Yes	No
• conduct rodent or arthropod-disease-prevention training?	Yes	No
• have the proper safety equipment (eyewash kits, spill control equipment, overpack containers) on hand?	Yes	No
8-2. Are personnel who apply pesticides		
• properly trained and certified?	Yes	No
• included in the following occupational health initiatives (AR 40-5, para 10-15	5):	
medical surveillance?	Yes	No
health education?	Yes	No
respiratory protection?	Yes	No
8-3. Are Material Safety Data Sheets (MSDSs) available for all pesticides?	Yes	No
8-4. Are respirators fit-tested and inspected regularly?	Yes	No
8-5. Are the correct respirator cartridges on hand?	Yes	No

8-6.	Does the Sec/Det have an SOP for the proper use and storage of entomology field equipment and storage and for the application of pesticides?	Yes	No
8-7.	Does the PVNTMED Sec/Det have the proper personal protective equipment (PPE) on hand?	Yes	No
8-8.	Is the PPE serviceable?	Yes	No
8-9.	Are 91S personnel trained on the proper use of all PPEs?	Yes	No
8-10	. Are the following publications on hand:		
•	AR 40-574, Aerial Dispersal of Pesticides?	Yes	No
•	AR 200-1, Environmental Protection and Enhancement?	Yes	No
•	AR 420-76, Pest Management?	Yes	No
•	TB MED 561, Occupational and Environmental Health Pest Surveillance?		
•	SB 3-40, Pesticides?	Yes	No
•	TIM No. 14, Personal Equipment for Pest Management Personnel?	Yes	No
•	TM 5-632, Military Entomology Operational Handbook?	Yes	No
8-13	The following Technical Guides are available from the U.S. Army Center Health Promotion and Preventive Medicine by calling DSN 584-4408.	for	
•	TG 114, Guide for the Medical Surveillance of Pest Controllers.		
•	TG 138, Guide to Commensal Rodent Control.		
•	TG 142, Managing Health Hazards Associated with Bird and Bat Excrement.		

# **SECTION 9: FIELD SANITATION**

The field sanitation team (FST) within each company is an extension of the PVNTMED Sec/Det. The PVNTMED Sec/Det cannot cover all sanitation issues within a theater of operations. The PVNTMED Sec/Det must ensure company FSTs are trained and used within the units. The following questions address FST training and compliance inspections.

9-1. Are supported units aware of the requirements for an FST per company/battery/Det?	Yes	No
9-2. Does the supported unit operations plan/order:		
• address the requirement for an FST?	Yes	No
• address the requirement for field sanitation supplies and equipment?	Yes	No
9-3. Does the PVNTMED Sec/Det		
• conduct FST training for supported units?	Yes	No
• maintain a list of qualified FST trained personnel per unit?	Yes	No
• conduct field inspections of company-level FST?	Yes	No
• have a compliance inspection checklist to conduct FST inspections in field operations?	Yes	No
• have a compliance inspection checklist to conduct FST inspections in garrison operations?	Yes	No
<ul> <li>address the following questions in compliance inspections:</li> </ul>		
Are organic medical personnel (91B) used as field sanitation team members when available (AR 40-5, para 14-3)?	Yes	No
Is the FST certified and on orders (AR 40-5, para 14-3)?	Yes	No
Is a minimum of one NCO and one enlisted soldier on the team (AR 40-5, para 14-3)?	Yes	No
Is the field sanitation SOP on hand (AR 40-5, para 14-3)?	Yes	No

	Does the unit have a cold weather injury prevention SOP (AR 40-5, Appendix B-3)?	Yes	No
	Does the unit have a hot weather injury prevention SOP (AR 40-5, Appendix B-2)?	Yes	No
	Is unit-level training conducted and documented (AR 40-5, para 14-3)? .	Yes	No
	Does the FST understand its garrison and field mission (AR 40-5, para 14-3 and FM 21-10-1)?	Yes	No
	Are the required publications on hand (AR 40-5, FM 21-10, and FM 21-10-1)?	Yes	No
	Are the required field sanitation supplies and equipment on hand or on order (AR 40-5, Table 14-1 and Appendix Z-1)?	Yes	No
	Are the supplies and equipment stored properly (AR 40-5, para 14-3)? .	Yes	No
	Are the supplies maintained in operating condition, with no deterioration, and no expiration (AR 40-5, para 14-3)?		No
9-4.	. Are the following publications on hand		
•	FM 21-10, Field Hygiene and Sanitation?	Yes	No
•	FM 21-10-1, Unit Field Sanitation Team?	Yes	No

# SECTION 10: INDUSTRIAL HYGIENE

Industrial hygiene is concerned with recognizing, evaluating, and controlling occupational health hazards in both a garrison and a field setting. The ESO is responsible for managing the industrial hygiene concerns of the unit with guidance from the installation industrial hygiene (IH) office. The following questions address the IH program.

#### **10-1.** Does the PVNTMED Sec/Det:

• conduct training on the IH set?	Yes	No
• assist the installation IH section with surveys to recognize potential hazards within the units they support?	Yes	No
• ensure supported units are aware of hazardous communication (HAZCOM) requirements?	Yes	No
10-2. Have unit personnel received the proper HAZCOM training?	Yes	No
10-3. Does the unit practice pollution prevention techniques by:		
• eliminating toxic materials?	Yes	No
• substituting less toxic materials?	Yes	No
• changing operational processes?	Yes	No
10-4. Are MSDSs available for all hazardous chemicals?	Yes	No
10-5. Is appropriate PPE available (gloves, goggles/safety glasses, face shields, respirators)?	Yes	No
10-6. Are personnel trained on the proper use of PPE?	Yes	No
10-7. Are the following publications on hand		
• TB MED 503, Occupational and Environmental Health: The Army Industrial Hygiene Program?	Yes	No
• AR 385-10, Army Safety Program?	Yes	No
• AR 40-5, Preventive Medicine?	Yes	No

AR 11-34, The Army Respiratory Protection Program? . . . . . . . . . . . Yes No
 American Conference of Governmental Industrial Hygienists (ACGIH)
 Threshold Limit Values Booklet? . . . . . . . . . . . . . . . . . . Yes No

**NOTE:** Coordinate with the installation Industrial Hygiene Office for further guidance.

# SECTION 11: WASTE DISPOSAL

# 11-1. (Hazardous Waste) Does the PVNTMED Sec/Det:

• coordinate with the garrison staff for hazardous material spill procedures?	Yes	No
• ensure the hazardous material spill procedures are distributed throughout all supported units?	'es	No
• identify units which create and store hazardous material?	l'es	No
• inspect units with hazardous material during field operations?	l'es	No
<ul> <li>coordinate with the Medical Department Activity (MEDDAC)</li> <li>PVNTMED to identify areas of responsibility for hazardous material operations while in garrison?</li> </ul>	7es	No
• turn in excess, used or unserviceable hazardous materials according to local regulations (AR 200-1)?		
11-2. (Field Waste) Does the PVNTMED Sec/Det:		
• coordinate with local authorities to identify proper waste disposal operations during field exercises?	'es	No
<ul> <li>inspect supported units for proper field waste disposal methods during field operations for the following:</li> </ul>		
food service?	es	No
reverse osmosis water purification unit (ROWPU) operations? Y	es	No
medical treatment stations? Y	es	No
maintenance operations?	es	No
latrine facilities?	es	No
field shower points?	es	No
laundry points?	es	No
general garbage disposal?	es :	No

pest control operations?	Yes	No
• inspect the field sanitation teams to ensure they have an adequate supply of materials to conduct field waste disposal operations while in the field?	Yes	No
11-3. (Medical Waste) Does the PVNTMED Sec/Det:		
• ensure supported units segregate regulated medical waste according to HSC Regulation 40-35?	Yes	No
• have an SOP for regulated medical waste disposal?	Yes	No
• ensure supported units have an SOP for regulated medical waste disposal?	Yes	No
• coordinate with the Division Medical Supply Office (DMSO) and/or installation PVNTMED to evaluate and validate methods of destruction codes (MODC) of excess, used, or unserviceable medical material to assure they are applicable with federal, state, and local regulations?	Yes	No
• coordinate with the DMSO or medical logistics battalion to ensure an adequate supply of medical regulated waste containers are available for training operations, POM operations and deployment operations?	Yes	No
11-4. Do units practice proper field waste disposal operations (i.e., hazardous waste, regulated medical waste, human waste and solid waste) during field training exercises?	Yes	No
11-5. Are the following publications on hand:		
• AR 40-61, Medical Logistics Policies and Procedures?	Yes	No
• TM 38-410, Storage and Handling of Hazardous Material?	Yes	No
• AR 200-1, Environmental Protection and Enhancement?	Yes	No
COMMENTS:		

# APPENDIX A References

AR 11-34	The Army Respiratory Protection Program	
AR 40-5	Preventive Medicine	15 Oct 90
AR 40-61	Medical Logistics Policies and Procedures	30 Apr 86
AR 40-657	Veterinary/Medical Food Inspection and Laboratory Service	19 May 88
AR 40-574	Aerial Dispersal of Pesticides	26 Apr 76
AR 200-1	Environmental Protection and Enhancement	23 Apr 90
AR 385-10	Army Safety Program	23 May 88
AR 385-40	Accident Reporting and Records	1 Apr 87
AR 385-63	Policies and Procedures for Firing Ammunition for Training, Target Practice and Combat	15 Oct 83
AR 420-76	Pest Management	3 Jun 86
AR 600-110	Identification, Surveillance, and Administration of Personnel Infected with Human Immunodeficiency Virus	11 Mar 88
AR 670-1	Wear and Appearance of Army Uniforms and Insignia	1 Oct 92
AR 700-136	Land Based Water Resources Management in Contingency Operations	1 Oct 84
DA PAM 40-501	Hearing Conservation	
TB MED 503	Occupational and Environmental Health: The Army Industrial Hygiene Program	
TB MED 507	Occupational and Environmental Health Prevention, Treatment and Control of Heat Injury	Jul 80
TB MED 530	Occupational and Environmental Health Food Service Sanitation	Nov 91

TB MED 561	Occupational and Environmental Health Pest Surveillance	
TB MED 575	Occupational and Environmental Health Swimming Pools and Bathing Facilities	2 Jul 93
TB MED 576	Occupational and Environmental Health Sanitary Control and Surveillance of Water Supplies at Fixed Installations	Mar 82
TB MED 577	Occupational and Environmental Health Sanitary Control and Surveillance of Field Water Supplies	Mar 86
FORSCOM Reg 700-2	Logistic FORSCOM Standing Logistics Instructions	
HSC Reg 40-35	Medical Services - Management of Regulated Medical Waste (RMW)	27 Dec 93
USAEHA TG 114	Guide for the Medical Surveillance of Pest Controllers	Mar 76
USAEHA TG 138	Guide to Commensal Rodent Control	Dec 91
USAEHA TG 142	Managing Health Hazards Associated with Bird and Bat Excrement	Dec 92
FM 8-10	Health Service Support in a Theater of Operations	1 Mar 91
FM 8-10-4	Medical Platoon Leaders' Handbook - Tactics Techniques and Procedures	16 Nov 90
FM 8-10-7	Health Service Support in a Nuclear, Biological, and Chemical Environment	22 Apr 93
FM 8-10-24	Area Support Medical Battalion	
FM 8-33	Control of Communicable Diseases in Man	31 May 91
FM 8-55	Planning for Health Service Support	9 Sep 94
FM 8-250	Preventive Medicine Specialist	27 Jan 86
FM 10-52	Water Supply in Theaters of Operations	11 Jul 90
FM 10-52-1	Water Supply Point Equipment and Operations	

FM 21-10	Field Hygiene and Sanitation	22 Nov 88
FM 21-10-1	Unit Field Sanitation Team	11 Oct 89
FM 25-100	Training the Force	15 Nov 88
FM 25-101	Battle Focused Training	
SB 3-40	Pesticides	20 May 87
STP 21-24	Soldiers Manual of Common Tasks	Oct 92
TIM No. 14	Personal Equipment for Pest Management Personnel	
TM 5-632	Military Entomology Operational Handbook	
TM 5-660	Maintenance and Operation of Water Supply, Treatment, and Distribution Systems	
TM 5-662	Swimming Pool Operations and Maintenance	
TM 38-410	Storage and Handling of Hazardous Material	

American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices Booklet, published annually.

Safety Color Code Markings, Signs and Tags - Information Guide

#### **Forms**

<b>DA Form 5161</b>	<b>Comprehensive Food Service Inspection</b>
<b>DA Form 5162</b>	Routine Food Service Inspection
DA Form 5456-R	Water Point Inspection
DA Form 5457-R	Potable Water Container Inspection
DA Form 5458-R	Shower/Decontamination Point Inspection

# APPENDIX B JOINT MEDICAL SURVEILLANCE FORM (CLASSIFICATION) WEEKLY MEDICAL SURVEILLANCE REPORT

1. T	O:	DTG SUBMITTED:	
	PERATION/EXERCISE		
2. F	ROM (COMPONENT/UNIT/SECTION):		
a.	REPORTING PERIOD (DTG TO DTG):_		
b.	AVERAGE STRENGTH DURING REPOR	RTING PERIOD:	
3. <u>G</u>	ENERAL DIAGNOSTIC CATEGORIES	<u># NEV</u>	V CASES
	HEAT/COLD INJURIES (H/C). Heat stroustion, dehydration, sunburn, frostbite, chill		
b. dyser	GASTRO-INTESTINAL ILLNESSES (G-Intery, gastritis, food poisoning, constipation,	). Diarrhea, gastroenteritis, intestinal parasites.	
c. colds	RESPIRATORY ILLNESSES (RES). Upp, bronchitis, asthma, pneumonia, pharyngiti	er respiratory infections, s, otitis, sinusitis.	
ellul	DERMATOLOGICAL ILLNESSES (DER) itis, fungal or bacterial infections, contact d bites, skin ulcers and eschars.		7
nfec njur	OPHTHALMIC ILLNESSES/INJURIES (Ecions or irritations, corneal abrasions, foreign, trauma not associated with trauma reporties, paragraph 3g.	n bodies, solar injury, laser	
anxie	PSYCHIATRIC ILLNESSES (PSY). Deprety, neuroses, psychotic reactions, suicide attention or substance abuse.	ession, situational reactions, empts, behavioral reaction to	
acer:	ORTHOPEDIC/SURGICAL INJURIES (In ations, abrasions, internal injuries, burns an arm), non-envenomating animal bites (usually includes battle, non-battle, occupational	d thermal injuries (not mammal or reptile), other	

TG 202, Field ESO Checklist, Feb 95
h. MEDICAL ILLNESSES (MED). Cardiac-related problems such as chest pain, hypertension; neurological problems such as headaches, convulsions, syncopal episodes; allergic reactions, including systemic reactions to venomous bites/stings; hepatitis; urogenital illnesses not associated with sexually transmitted disease; internal conditions not related to trauma (e.g., appendicitis).
i. SUBSTANCE ABUSE (ABU). Abuse of alcohol, illegal drugs including marijuana, pharmaceuticals (prescribed or unprescribed), or other substances.
j. DENTAL (DEN). Dental injury, disease, or condition requiring care by a dentist.
k. FEVERS OF UNDETERMINED ORIGIN (FUO). Fevers not apparentlyassociated with diagnosed illness or injury.
I. SEXUALLY TRANSMITTED DISEASES (STD). Gonorrhea, syphilis, chlamydia, genital herpes, pelvic inflammatory disease, venereal warts/chancres.
4. <u>SPECIAL DIAGNOSTIC CATEGORIES.</u> # NEW CASES
Diseases, injuries, or medical conditions of special interest within the command or as directed by higher authority (e.g., malaria, barotrauma), including subcategories already reported under a General Diagnostic Category (e.g., the number of orthopedic/surgical injuries that were sports-related).
a
b
(continue as necessary, subparagraph c., d., etc.)
5. <u>COMMENTS/REMARKS</u> . Clarify or explain specific entries in paragraphs 3 and/or 4 as needed. Reference applicable paragraph/subparagraph.
SIGNED
NOTE AND LED

# INSTRUCTIONS FOR COMPLETING AND SUBMITTING THE WEEKLY MEDICAL SURVEILLANCE REPORT

- 1. This report applies to service components participating in all joint exercises and operations, including those conducted by Joint Task Force and Sub-Unified Command organizations.
- 2. A timely, comprehensive medical surveillance program can inform commanders of the health of their commands and identify trends that can be attacked before significant casualties occur. Component surgeons will report disease and injury incidence in the enclosed format. Reports will be sent weekly to the responsible Unified Command Surgeon, and are due within five days after the end of reporting week. Within components, data should be collected from the levels where initial diagnosis is made, to ensure that reports include cases involving loss of duty time without hospitalization. The basis for this report is INITIAL DIAGNOSIS OF NEW CASES, not initial complaint, hospital admission, or follow-up visits.
- 3. For Army and debarked Marine/Navy components, the primary level for data collection should be the Battalion Aid Station or equivalent; for the Air Force component, the primary level should be the Air Transportable Clinic (ATC), if present, or the Squadron Medial Element if an ATC is not present. For the shipboard Navy and embarked Marines, the primary level should be Sick Bay. Components are encouraged to implement this reporting format at the levels where data are collected, and to automate the format within existing data processing systems.
- 4. This is not a hospital admission/disposition report. At medical treatment facilities with inpatient and/or holding capabilities, only two types of cases should appear in this report: those INITIALLY DIAGNOSED at "sick call" or equivalent held for the facility staff, collocated units, and walk-ins; and, emergency cases that bypassed lower reporting levels during evacuation.
- 5. In facilities where patients from other services are seen for initial diagnosis, report cases by service in separate reports or in a single consolidated report, per the component Command Surgeon's guidance. Where applicable, list other service AVERAGE STRENGTH as "unknown", and briefly explain in paragraph 5. Component surgeons must ensure that other-service data are transmitted to the appropriate surgeons of other components.
- 6. To simplify reporting, battle and non-battle injuries should be reported in appropriate General Diagnostic Categories, but listed by type in paragraph 5, COMMENTS/ REMARKS. "Battle injuries" are those caused during hostile actions directly by munitions or other weapons (e.g., bullet or shrapnel wounds), or by their proximal effects (e.g., burns from battlefield explosions, lacerations from flying debris). All others are reported as non-battle injuries, including those occurring on the battlefield but not associated with munitions, weapons, or direct hostile action (e.g., injuries from a vehicle accident not caused by enemy action).
- 7. Since this report reflects medical <u>effects</u>, it is important from a preventive medicine standpoint to identify in paragraph 5, any unusual or recurring <u>causes</u> of these effects.

#### GLOSSARY

#### **Abbreviations**

**ACGIH** American Conference of Governmental Industrial Hygienists

**AFMIC Armed Forces Medical Intelligence Center** 

AO **Area of Operations** 

**ASMB Area Support Medical Battalion** 

Bde Brigade

**BDU Battle Dress Uniform** 

CTA Common Table of Allowances

**CTT Common Task Training** 

**DEARs Disease Environmental Alert Report** 

Det Detachment Div Division

**DMSO Division Medical Supply Office DNBI** Disease and Non-Battle Injury

**DPMIAC Defense Pest Management Information Analysis Center** 

**ESO Environmental Science Officer** 

FM Field Manual

**FST** Field Sanitation Team **HAZCOM Hazardous Communication** 

ΤΉ **Industrial Hygiene** 

LBE Load Bearing Equipment **MEDDAC Medical Department Activity** MOA Memorandum of Agreement MODC **Methods of Destruction Codes** MOU Memorandum of Understanding **MSDSs Material Safety Data Sheets** MTOE Modified Table of Equipment NCO **Noncommissioned Officer** 

**NCOIC** Noncommissioned Officer in Charge **POM** Preparation for Overseas Movement

PPE **Personal Protective Equipment** 

**PVNTMED Preventive Medicine** 

**ROWPU** Reverse Osmosis Water Purification Unit

SC Supply Catalog

Sec Section

SOP Standard Operating Procedures

TDY **Temporary Duty** TG **Technical Guide** 

**TISA Troup Issue Supply Activity** 

TM Technical Manual

**TMDE** Test, Measurement and Diagnostic Equipment

TO&E **Table of Organizations and Equipment** 

UAL **Unit Assembly Listing** 

